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09/866,245	05/25/2001	Nanami Miki	450100-03244	4576

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EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2623

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/866,245	<b>Applicant(s)</b> MIKI ET AL.	
	<b>Examiner</b> Usha Raman	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2006.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 14<sup>th</sup>, 2006 has been entered.

***Response to Arguments***

2. Applicant's arguments filed April 14<sup>th</sup>, 2006 have been fully considered but they are not persuasive.

Applicant argues that Schein does not teach the limitations of claim 1, including the step of "extracting a plurality of additional keywords from a dictionary database as a function of the input retrieval keyword". The examiner respectfully disagrees. Schein discloses the aforementioned feature through an example where the user enters an input retrieval keyword "DR." and as a result of which, a plurality of relevant keywords matching the input retrieval keyword are extracted (see column 13, lines 39-43) from a dictionary database (see column 12, lines 33-36). As a result, the rejection is maintained.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 recites the limitation, "a plurality of dictionary databases". As stated in previously the office action dated, February 17<sup>th</sup> 2006, there is no support in the disclosure for "plurality of dictionary databases".

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 6, 11-13, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schein et al. (US Pat. 6,133,909).

In regards to claim 1, Schein teaches an electronic program guide retrieval method (see column 1, lines 49-56) comprising the steps of:

Receiving an input retrieval keyword from a client side (see column 2, lines 18-23);

Accessing a dictionary database based on an input retrieval keyword; (see column 13, lines 33-39).

Extracting a plurality of additional keywords (e.g. additional keywords are shown as relevant results for query "DR.") from dictionary database as a function of the input retrieval keyword, wherein each of the plurality of additional keywords are related to the input retrieval keyword (see column 13, lines 36-43);

Accessing an electronic program guide database (see column 13, lines 10-16) that stores electronic program guide data as a function of the first keyword and a plurality of additional keywords (in order to find a relevant search results to a user's query, the EPG data has to be stored with a portion of the keyword, that enables it to be identified as a query result); and

Downloading only electronic program guide data based on the extracted relevant keyword information from the electronic program guide data stored in said electronic program guide database and the input retrieval keyword (see column 13, lines 10-20).

Claim 11 is an apparatus claim corresponding to the method claim 1, and is analyzed and rejected as previously discussed.

As to claim 2, Schein discloses a method in which the EPG system database stores information relevant to television programs, such as movie titles and directors. (Col. 13, Ln. 33- 36). The user can access this information by entering relevant characters or words, which correspond to the desired program to be located (Col. 13, Ln. 36-48). Therefore, it is inherent that said database contain keywords and

words relevant to those keywords, in order to match corresponding terms in response to a user request. Accordingly, each and every limitation of applicant's claim 2 has been anticipated by Schein.

As to claim 6, Schein discloses a method wherein the retrieval keywords and the relevant- keyword information extracted from the database are interrelated to each other. (Col. 13, Ln. 1- 20 & 33-48). Accordingly, each and every limitation of claim 6 is anticipated by Schein.

As to claim 12, Schein's system contains a database, which could be located in the set-top box, television, or the like (i.e., client side). (Col. 9, Ln. 21-36). Accordingly, each and every limitation of claim 12 has been anticipated by Schein.

As to claim 13, Schein teaches a system containing a database, which could be accessed via the internet (i.e., data server side), see Col. 8, Ln. 62-67 thru Col. 9, Ln. 1-9. Accordingly, each and every limitation of claim 13 has been anticipated by Schein.

As to claim 19, Schein's EPG includes data relevant to movie information (Fig. 10). Accordingly, each and every limitation of claim 19 is anticipated by Schein.

As to claim 20, Schein's EPG includes data relevant to drama information. (Col. 12, Ln. 17-20). Accordingly, each and every limitation of claim 20 is anticipated by Schein.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 8-10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Beach et al. (US Pre Grant Pub. 2003/0014753).

Applicant's claim 3 recites the EPG method of claim 1, wherein the retrieval keyword is the name of a person and the relevant information extracted from the database is one of or a combination of a nickname of said person, the 111 name of said person, the given name of said person, the name of a group relevant to said person, or another well-known name of said person. As discussed above, Schein contains all limitations of claim 1, but fails to disclose a method, which performs the limitations of claim 3. However, within the same field of endeavor Beach discloses an EPG wherein a name could be used as a keyword (Fig. 5). Also, the system can be modified to search any program attribute which could be indexed. (Page 2, Par. (00191). All of said "relevant-keyword information" listed in applicant's claim 3, could potentially be indexed within Beach's system. Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of Schein with the expanded indexing capability of Beach in order to provide a more extensive and flexible database from which the user could retrieve desired programming.

Applicant's claim 8 recites the EPG of claim 1, wherein the retrieval keyword belongs to a particular genre (category), while the relevant keyword information belongs to a different genre. As discussed above, Schein contains all limitations of claim 1, but fails to disclose the limitations of claim 8. However, within the same field of endeavor, Beach discloses a system in which a user can search an actor's name (genre of actor's names) and the system will retrieve all relevant information, which would include movies the actor appeared in (genre of movies). This, in essence, is a method of using a keyword from a certain genre, to retrieve relevant keyword information from a different genre. (Fig. 5 & 6; Page 2 Par. (00221). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the genre teaching of Beach in order to provide the user with a more flexible searching tool.

Applicant's claim 9 recites the EPG of claim 8, where when the particular genre is relevant to cooking, while the different genre is relevant to cooks. As discussed above, the combined teachings of Schein and Beach contain all limitations of claim 8. Specifying the genre as relevant to cooking, while the retrieval keyword is relevant to cooks is an obvious variant of claim 8 (because cooks and cooking could be categorized as different genres under the same logic of claim 8's rejection). Thus, Schein and Beach contain all limitations of claim 9. (Moreover, cooks and cooking are interrelated and therefore could be analyzed and rejected as based upon the teaching of Schein used to reject claim 6. Except here, of course, Schein would have to be used in a 103 combination with Beach).



Applicant's claim 10 recites the EPG of claim 8, wherein the particular genre is relevant to place names, the different genre is relevant to one of or a combination of neighboring city names, Country names, and regional names. As discussed above, the combined teachings of Schein and Beach contain all limitations of claim 8, but fail to specifically state the limitations recited in claim 10. However, claim 10 is an obvious variant of claim 8 because both claims are using a keyword from one genre to retrieve relevant keyword information from another genre. (In the alternative, the recited limitations are interrelated and thus, could be analyzed and rejected as in claim 6) Accordingly, the combined teachings of Schein and Beach contain all limitations of claim 10.

Applicant's claim 14 recites the EPG system of claim 11, wherein said client downloads and stores the program information. As discussed above, Schein contains all limitations of claim 11, but fails to teach whether the client is capable of downloading and storing program information. However, within the same field of endeavor, Beach further discloses the client unit is capable of downloading and storing program information. (Page 1, Par. (0018)). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the client side downloading/storing capability of Beach in order to provide the client with an efficient method of storing EPG programming.

9. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Kanungo et al. (US Pat. 5,966,637).

Applicant's claim 4 recites the EPG method of claim 1, wherein the retrieval keywords and the relevant keyword information is written in Hiragana and/or Katakana characters used in Japanese writing. As discussed above, Schein contains all limitations of claim 1, but fails to disclose a system capable of displaying Japanese language characters. However, within the same field of endeavor, Kanungo discloses a system capable of displaying multilingual text on set top boxes (Col. 3, Ln. 54-62), and specifically discusses hiragana and katakana characters (Col. 1, Ln. 49-58). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of Schein with the multilingual set-top box of Kanungo in order to provide the user with a system capable of searching and retrieving information via the Japanese language.

Claim 17 is an apparatus claim corresponding to the method claim 4, and is analyzed and rejected as previously discussed.

10. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Bohm et al. (US Pat. 5,404,507).

Applicant's claim 5 recites the method of claim 1, wherein when a misspelled retrieval keyword corresponds to a misused character keyword stored in the database, only the relevant- keyword information is used to perform the retrieval. As discussed above, Schein contains all limitations of claim 1, but fails to disclose the limitations of claim 5. However, within the same field of endeavor, Bohm (also cited in applicant's IDS) discloses a retrieval system capable of analyzing a misspelled search term. If the user misspells a search term, the system retrieves probable

alternative words stored on the database and presents them to the user. The user then selects one of the alternative words in order to retrieve the original desired data (Col. 2, Ln. 11-29). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of Schein with the database search capability of Bohm in order to provide a EPG searching method capable of retrieving desired programming based upon an incorrectly entered search term. Claim 16 is an apparatus claim corresponding to the method claim 5, and is analyzed and rejected as previously discussed herein.

Claim 16 is an apparatus claim corresponding to the method claim 5, and is analyzed and rejected as previously discussed therein.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being patentable over Schein et al. (US Pat. 6,133,909) in view of Beach and further in view of Livowsky (US Pat. 6,598,030).

Applicant's claim 7 recites the EPG of claim 1, wherein when part of a retrieval keyword is entered, the entire keyword and the relevant-keyword information are retrieved from a database storing previously input keywords in a predetermined order. As discussed above, Schein contains all limitations of applicant's claim 1, but fails to specifically disclose the limitations of claim 7. However, within the same field of endeavor, Beach discloses an EPG system whereby the system can retrieve keywords and relevant keywords based only upon entering a single character (i.e. part of a keyword). (Fig. 4, and Page 2 Par. (00211), but fails to disclose whether the system is capable of storing previously entered

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keywords in a predetermined order. However, within the same field of endeavor, Livowsky discloses a method of searching a database, whereby the database "learns" from a user's past entries (i.e., keywords) and updates the database accordingly. (Col. 2, Ln. 26-33; Col. 8, Ln. 8-15). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the modified teachings of Schein and Beach with the "learning" capability of Livowsky's database in order to provide the user with a more expansive and flexible searching tool, which would be capable of updating the database.

12. Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Livowsky (US Pat. 6,598,039).

Applicant's claim 15 recites the EPG system of claim 11, wherein the client access a necessary part of the data server via a routing server, which stores route information for the data server. As discussed above, Schein contains all limitations of applicant's claim 11, but fails to disclose the additional limitations of claim 15. However, within the same field of endeavor, Livowsky discloses a searching database wherein the user accesses the desired portion of the system database (i.e., data server) via a system server, which distributes (i.e., routes) the search requests among core engines (Col. 2, Ln. 44-57; Col. 4, Ln. 1-12 & 30-36). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of Schein with the multiple server system of Livowsky in order to provide a more efficient searching system.

In regard to claim 23, Schein discloses an EPG retrieval system comprising:

A data server including a plurality of databases, one of which is a television electronic program guide database for storing program information of an EPG (see column 8, lines 62-67 and column 9, lines 1-9) containing only (this is inherent because Schein teaches identifying each show with various identifiers so that a selection/search criteria matching that identifier produces results matching only those preset identifiers defined by a EPG provider and not some arbitrary identifier; see column 11, lines 46 thru column 14, line 10) keywords determined by an EPG provider as retrieval keywords;

A client having a certain data storage capacity (hard disk 14) comprising input means (user input 20) for inputting a retrieval keyword for retrieving the program information (see column 3, lines 24-32);

A dictionary database provided at the data server side and the client side for storing retrieval keywords and relevant keywords to said retrieval keywords (see column 13, lines 33-43);

Extracting relevant keywords from dictionary database related to input keyword (see column 13, lines 36-43), wherein the client further sends the relevant keyword (selection of one of plurality of keywords) to retrieve program information from data server (see column 13, lines 43-48).

Wherein an apparatus (client unit 400) including an access unit (402) for accessing data server and an input unit (410, 432) for inputting a retrieval keyword,

can perform retrieval on the EPG data by using relevant keywords extracted from the dictionary database (see column 13, lines 36-48) at the server side.

Schein fails to disclose a routing server having an access unit for accessing selectively the database and routing information, wherein the client sends the relevant keyword to the routing server and accesses one of the databases via the routing server and performs retrieval by accessing program information by selecting the route to the database.

Livowsky discloses a searching database wherein the user accesses the desired portion of the system database (i.e., data server) via a system server, which distributes (i.e., routes) the search requests among core engines (Col. 2, Ln. 44-57; Col. 4, Ln. 1-12 & 30-36).

It would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of Schein with the multiple server system of Livowsky in order to provide the client access to databases at the data server using routing servers for various routes for load balancing, thereby providing a more efficient searching system.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Lee et al. (US Pat. 6,463,428).

Applicant's claim 18 recites the EPG system of claim 11, wherein said dictionary database stores previously input keywords so that the input keywords are included in the relevant-keyword information, and the stored keywords are arranged in order of frequency of use. As discussed above, Schein contains all limitations of

claim 11, but fails to teach the limitations of claim 18. However, within the same field of endeavor, Lee et al discloses a system capable of storing keywords and ranking them based upon their frequency of use (Col. 5, Ln. 8-16; Col. 15, Ln. 10-64; Fig. 18). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the keyword storage capability of Lee et al in order to provide the user with a more efficient searching system.

14. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909).

Applicant's claim 21 recites the EPG system of claim 11, wherein the program information includes data relevant to place names. As discussed above, Schein contains all limitations of claim 1. Specifically, Schein discloses a method of searching an EPG database (Col. 1, Ln. 49-56), wherein, via an interface, a user can enter certain attributes (i.e., keywords) (Col. 2, Ln. 18-23), which retrieve information relevant to the entered keyword from the EPG database (Col. 12, Ln. 66-67 thru Col. 13, Ln. 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data (Col. 13, Ln. 33-48). But, Schein fails to specifically disclose whether the program information retrieved can be relevant to place names. However, since Schein's system can retrieve any information contained on the database, which is relevant to the keyword, it would have been obvious that this information could contain data relevant to place names if the user entered a keyword related to a place name. For example, if a user enters "cowboys"

as a keyword, Schein's system would likely retrieve a Dallas Cowboys football game to be played in Texas. Or, if a user were to input "geographic", Schein's system would likely retrieve any programs listed on the geography channel, some of which would be relevant to place names. In essence, would have been obvious that Schein's system could retrieve data relevant to place names because it is highly likely various programs listed on the database are related to or contain place names. Thus, Schein contains all limitations of applicant's claim 21.

Although claim 22 does not correspond to claim 21, it is analyzed and rejected accordingly because it contains the same elemental structure.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

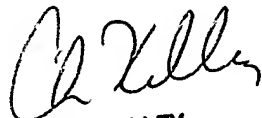
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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